SEQUENCE LISTING

<110> MORI, MASAAKI
SHIMOMURA, YUKIO
TAKEKAWA, SHIRO
SUGO, TSUKASA
ISHIBASHI, YOSHIHIRO
KITADA, CHIEKO
SUZUKI, NOBUHIRO

<120> SCREENING METHOD

<130> 56001(46342)

<140> 09/869,540
<141> 2001-06-27

<150> PCT/JP99/07337
<151> 1999-12-27

<150> JP 10-374454
<151> 1998-12-28

<150> JP 11-122688
<151> 1999-04-28

<150> JP 11-249300
<151> 1999-09-02

<160> 24

<170> PatentIn Ver. 2.1

a'

<210> 1
<211> 16
<212> PRT
<213> Rattus sp.

<220>
<223> The 7th cysteine residue binds with the 16th cysteine residue to form a intra-molecular disulfide-bond

<400> 1
Asp Phe Asp Met Leu Arg Cys Met Leu Gly Arg Val Tyr Arg Pro Cys
1 5 10 15

<210> 2
<211> 19
<212> PRT
<213> Rattus sp.

<220>
<223> The 7th cysteine residue binds with the 16th cysteine residue to form a intra-molecular disulfide-bond

<400> 2
Asp Phe Asp Met Leu Arg Cys Met Leu Gly Arg Val Tyr Arg Pro Cys
1 5 10 15

Trp Gln Val

<210> 3
<211> 32
<212> DNA
<213> Artificial Sequence

<220>
<223> Description of Artificial Sequence: Synthetic oligonucleotide

<400> 3
gtcgacatgg atctgcaaac ctcgttgctg tg 32

<210> 4
<211> 32
<212> DNA
<213> Artificial Sequence

<220>
<223> Description of Artificial Sequence: Synthetic oligonucleotide

<400> 4
actagttcag gtgcctttgc tttctgtcct ct 32

A1 cont

<210> 5
<211> 353
<212> PRT
<213> Rattus sp.

<400> 5
Met Asp Leu Gln Thr Ser Leu Leu Ser Thr Gly Pro Asn Ala Ser Asn
1 5 10 15

Ile Ser Asp Gly Gln Asp Asn Leu Thr Leu Pro Gly Ser Pro Pro Arg
20 25 30

Thr Gly Ser Val Ser Tyr Ile Asn Ile Ile Met Pro Ser Val Phe Gly
35 40 45

Thr Ile Cys Leu Leu Gly Ile Val Gly Asn Ser Thr Val Ile Phe Ala
50 55 60

Val Val Lys Lys Ser Lys Leu His Trp Cys Ser Asn Val Pro Asp Ile
65 70 75 80

Phe Ile Ile Asn Leu Ser Val Val Asp Leu Leu Phe Leu Leu Gly Met
85 90 95

Pro Phe Met Ile His Gln Leu Met Gly Asn Gly Val Trp His Phe Gly
100 105 110

Glu Thr Met Cys Thr Leu Ile Thr Ala Met Asp Ala Asn Ser Gln Phe
115 120 125

Thr Ser Thr Tyr Ile Leu Thr Ala Met Thr Ile Asp Arg Tyr Leu Ala
130 135 140

Thr Val His Pro Ile Ser Ser Thr Lys Phe Arg Lys Pro Ser Met Ala
145 150 155 160

Thr Leu Val Ile Cys Leu Leu Trp Ala Leu Ser Phe Ile Ser Ile Thr
165 170 175

Pro Val Trp Leu Tyr Ala Arg Leu Ile Pro Phe Pro Gly Gly Ala Val
180 185 190

Gly Cys Gly Ile Arg Leu Pro Asn Pro Asp Thr Asp Leu Tyr Trp Phe
195 200 205

Thr Leu Tyr Gln Phe Phe Leu Ala Phe Ala Leu Pro Phe Val Val Ile
210 215 220

Thr Ala Ala Tyr Val Lys Ile Leu Gln Arg Met Thr Ser Ser Val Ala
225 230 235 240

Pro Ala Ser Gln Arg Ser Ile Arg Leu Arg Thr Lys Arg Val Thr Arg
245 250 255

Thr Ala Ile Ala Ile Cys Leu Val Phe Phe Val Cys Trp Ala Pro Tyr
260 265 270

Tyr Val Leu Gln Leu Thr Gln Leu Ser Ile Ser Arg Pro Thr Leu Thr
275 280 285

Phe Val Tyr Leu Tyr Asn Ala Ala Ile Ser Leu Gly Tyr Ala Asn Ser
290 295 300

Cys Leu Asn Pro Phe Val Tyr Ile Val Leu Cys Glu Thr Phe Arg Lys
305 310 315 320

Arg Leu Val Leu Ser Val Lys Pro Ala Ala Gln Gly Gln Leu Arg Thr
325 330 335

Val Ser Asn Ala Gln Thr Ala Asp Glu Glu Arg Thr Glu Ser Lys Gly
340 345 350

Thr

a' cont

<210> 6
<211> 1074
<212> DNA
<213> Rattus sp.

<400> 6
gtcgacatgg atctgcaaac ctcgttgctg tccactggcc ccaatgccag caacatctcc 60
gatggccagg ataatctcac attgccgggg tcacctcctc gcacagggag tgtctcctac 120
atcaacatca ttatgccttc cgtgtttggt accatctgtc tcctgggcat cgtgggaaac 180
tccacggtca tctttgctgt ggtgaagaag tccaagctac actggtgcag caacgtcccc 240
gacatcttca tcatcaacct ctctgtggtg gatctgctct tcctgctggg catgcctttc 300
atgatccacc agctcatggg gaacggcgtc tggcactttg gggaaaccat gtgcaccctc 360
atcacagcca tggacgccaa cagtcagttc actagcacct acatcctgac tgccatgacc 420
attgaccgct acttggccac cgtccacccc atctcctcca ccaagttccg gaagccctcc 480
atggccaccc tggtgatctg cctcctgtgg gcgctctcct tcatcagtat cacccctgtg 540
tggctctacg ccaggctcat tcccttccca gggggtgctg tgggctgtgg catccgcctg 600
ccaaacccgg acactgacct ctactggttc actctgtacc agtttttcct ggcctttgcc 660
cttccgtttg tggtcattac cgccgcatac gtgaaaatac tacagcgcat gacgtcttcg 720
gtggccccag cctcccaacg cagcatccgg cttcggacaa agagggtgac ccgcacggcc 780
attgccatct gtctggtctt ctttgtgtgc tgggcaccct actatgtgct gcagctgacc 840
cagctgtcca tcagccgccc gaccctcacg tttgtctact tgtacaacgc ggccatcagc 900
ttgggctatg ctaacagctg cctgaacccc tttgtgtaca tagtgctctg tgagaccttt 960
cgaaaacgct tggtgttgtc agtgaagcct gcagcccagg ggcagctccg cacggtcagc 1020
aacgctcaga cagctgatga ggagaggaca gaaagcaaag gcacctgaac tagt 1074

<210> 7
<211> 262
<212> RNA
<213> Rattus sp.

<400> 7
gcgaauuggg uaccgggccc ccccucgagg ucgacgguau cgauaagcuu gauaucgaau 60
uccugcagcc cgggggaucc gcccacuagu ucaggugccu uugcuuucug uccucuccuc 120
aucagcuguc ugagcguugc ugaccgugcg gagcugcccc ugggcugcag gcuucacuga 180
caacaccaag cguuuucgaa aggucucaca gagcacuaug uacacaaagg gguucaggca 240
gcuguuagca uagcccaagc ug 262

a' cont

<210> 8
<211> 18
<212> DNA
<213> Artificial Sequence

<220>
<223> Description of Artificial Sequence: Synthetic oligonucleotide

<400> 8
caacagctgc ctcaaccc 18

<210> 9
<211> 18
<212> DNA
<213> Artificial Sequence

<220>
<223> Description of Artificial Sequence: Synthetic oligonucleotide

<400> 9
cctggtgatc tgcctcct 18

<210> 10
<211> 1275
<212> DNA
<213> Homo sapiens

<400> 10
taggtgatgt cagtgggagc catgaagaag ggagtgggga gggcagttgg gcttggaggc 60
ggcagcggct gccaggctac ggaggaagac ccccttccca actgcggggc ttgcgctccg 120
ggacaaggtg gcaggcgctg gaggctgccg cagcctgcgt gggtggaggg gagctcagct 180
cggttgtggg agcaggcgac cggcactggc tggatggacc tggaagcctc gctgctgccc 240
actggtccca acgccagcaa cacctctgat ggccccgata acctcacttc ggcaggatca 300
cctcctcgca cggggagcat ctcctacatc aacatcatca tgccttcggt gttcggcacc 360
atctgcctcc tgggcatcat cgggaactcc acggtcatct tcgcggtcgt gaagaagtcc 420
aagctgcact ggtgcaacaa cgtccccgac atcttcatca tcaacctctc ggtagtagat 480
ctcctctttc tcctgggcat gcccttcatg atccaccagc tcatgggcaa tggggtgtgg 540
cactttgggg agaccatgtg caccctcatc acggccatgg atgccaatag tcagttcacc 600
agcacctaca tcctgaccgc catggccatt gaccgctacc tggccactgt ccaccccatc 660
tcttccacga agttccggaa gccctctgtg gccaccctgg tgatctgcct cctgtgggcc 720
ctctccttca tcagcatcac ccctgtgtgg ctgtatgcca gactcatccc cttcccagga 780
ggtgcagtgg gctgcggcat acgcctgccc aacccagaca ctgacctcta ctggttcacc 840
ctgtaccagt ttttcctggc ctttgccctg ccttttgtgg tcatcacagc cgcatacgtg 900
aggatcctgc agcgcatgac gtcctcagtg gcccccgcct cccagcgcag catccggctg 960
cggacaaaga gggtgacccg cacagccatc gccatctgtc tggtcttctt tgtgtgctgg 1020
gcaccctact atgtgctaca gctgacccag ttgtccatca gccgcccgac cctcaccttt 1080
gtctacttat acaatgcggc catcagcttg ggctatgcca acagctgcct caacccctttt 1140
gtgtacatcg tgctctgtga gacgttccgc aaacgcttgg tcctgtcggt gaagcctgca 1200
gcccaggggc agcttcgcgc tgtcagcaac gctcagacgg ctgacgagga gaggacagaa 1260
agcaaaggca cctga 1275

<210> 11
<211> 422
<212> PRT
<213> Homo sapiens

a' cont

<400> 11
Met Ser Val Gly Ala Met Lys Lys Gly Val Gly Arg Ala Val Gly Leu
1 5 10 15

Gly Gly Gly Ser Gly Cys Gln Ala Thr Glu Glu Asp Pro Leu Pro Asn
20 25 30

Cys Gly Ala Cys Ala Pro Gly Gln Gly Gly Arg Arg Trp Arg Leu Pro
35 40 45

Gln Pro Ala Trp Val Glu Gly Ser Ser Ala Arg Leu Trp Glu Gln Ala
50 55 60

Thr Gly Thr Gly Trp Met Asp Leu Glu Ala Ser Leu Leu Pro Thr Gly
65 70 75 80

Pro Asn Ala Ser Asn Thr Ser Asp Gly Pro Asp Asn Leu Thr Ser Ala
85 90 95

Gly Ser Pro Pro Arg Thr Gly Ser Ile Ser Tyr Ile Asn Ile Ile Met
100 105 110

```
Pro Ser Val Phe Gly Thr Ile Cys Leu Leu Gly Ile Ile Gly Asn Ser
        115                 120                 125

Thr Val Ile Phe Ala Val Val Lys Lys Ser Lys Leu His Trp Cys Asn
    130                 135                 140

Asn Val Pro Asp Ile Phe Ile Ile Asn Leu Ser Val Val Asp Leu Leu
145                 150                 155                 160

Phe Leu Leu Gly Met Pro Phe Met Ile His Gln Leu Met Gly Asn Gly
                165                 170                 175

Val Trp His Phe Gly Glu Thr Met Cys Thr Leu Ile Thr Ala Met Asp
            180                 185                 190

Ala Asn Ser Gln Phe Thr Ser Thr Tyr Ile Leu Thr Ala Met Ala Ile
        195                 200                 205

Asp Arg Tyr Leu Ala Thr Val His Pro Ile Ser Ser Thr Lys Phe Arg
    210                 215                 220

Lys Pro Ser Val Ala Thr Leu Val Ile Cys Leu Leu Trp Ala Leu Ser
225                 230                 235                 240

Phe Ile Ser Ile Thr Pro Val Trp Leu Tyr Ala Arg Leu Ile Pro Phe
                245                 250                 255

Pro Gly Gly Ala Val Gly Cys Gly Ile Arg Leu Pro Asn Pro Asp Thr
            260                 265                 270

Asp Leu Tyr Trp Phe Thr Leu Tyr Gln Phe Phe Leu Ala Phe Ala Leu
        275                 280                 285

Pro Phe Val Val Ile Thr Ala Ala Tyr Val Arg Ile Leu Gln Arg Met
    290                 295                 300

Thr Ser Ser Val Ala Pro Ala Ser Gln Arg Ser Ile Arg Leu Arg Thr
305                 310                 315                 320

Lys Arg Val Thr Arg Thr Ala Ile Ala Ile Cys Leu Val Phe Phe Val
                325                 330                 335

Cys Trp Ala Pro Tyr Tyr Val Leu Gln Leu Thr Gln Leu Ser Ile Ser
            340                 345                 350

Arg Pro Thr Leu Thr Phe Val Tyr Leu Tyr Asn Ala Ala Ile Ser Leu
        355                 360                 365

Gly Tyr Ala Asn Ser Cys Leu Asn Pro Phe Val Tyr Ile Val Leu Cys
    370                 375                 380

Glu Thr Phe Arg Lys Arg Leu Val Leu Ser Val Lys Pro Ala Ala Gln
385                 390                 395                 400

Gly Gln Leu Arg Ala Val Ser Asn Ala Gln Thr Ala Asp Glu Glu Arg
                405                 410                 415
```

a' cont

Thr Glu Ser Lys Gly Thr
420

<210> 12
<211> 31
<212> DNA
<213> Artificial Sequence

<220>
<223> Description of Artificial Sequence: Synthetic oligonucleotide

<400> 12
gtcgacatgg acctggaagc ctcgctgctg c 31

<210> 13
<211> 31
<212> DNA
<213> Artificial Sequence

<220>
<223> Description of Artificial Sequence: Synthetic oligonucleotide

<400> 13
actagttcag gtgcctttgc tttctgtcct c 31

<210> 14
<211> 33
<212> DNA
<213> Artificial Sequence

a' cont

<220>
<223> Description of Artificial Sequence: Synthetic oligonucleotide

<400> 14
agtcgacatg tcagtgggag ccatgaagaa ggg 33

<210> 15
<211> 33
<212> DNA
<213> Artificial Sequence

<220>
<223> Description of Artificial Sequence: Synthetic oligonucleotide

<400> 15
aactagttca ggtgcctttg ctttctgtcc tct 33

<210> 16
<211> 1074

<212> DNA
<213> Homo sapiens

<400> 16
gtcgacatgg acctggaagc ctcgctgctg cccactggtc ccaacgccag caacacctct 60
gatggccccg ataacctcac ttcggcagga tcacctcctc gcacggggag catctcctac 120
atcaacatca tcatgccttc ggtgttcggc accatctgcc tcctgggcat catcgggaac 180
tccacggtca tcttcgcggt cgtgaagaag tccaagctgc actggtgcaa caacgtcccc 240
gacatcttca tcatcaacct ctcggtagta gatctcctct ttctcctggg catgcccttc 300
atgatccacc agctcatggg caatggggtg tggcactttg gggagaccat gtgcaccctc 360
atcacggcca tggatgccaa tagtcagttc accagcacct acatcctgac cgccatggcc 420
attgaccgct acctggccac tgtccacccc atctcttcca cgaagttccg gaagccctct 480
gtggccaccc tggtgatctg cctcctgtgg gccctctcct tcatcagcat caccctgtg 540
tggctgtatg ccagactcat ccccttccca ggaggtgcag tgggctgcgg catacgcctg 600
cccaacccag acactgacct ctactggttc accctgtacc agtttttcct ggcctttgcc 660
ctgccttttg tggtcatcac agccgcatac gtgaggatcc tgcagcgcat gacgtcctca 720
gtggcccccg cctcccagcg cagcatccgg ctgcggacaa agagggtgac ccgcacagcc 780
atcgccatct gtctggtctt ctttgtgtgc tgggcaccct actatgtgct acagctgacc 840
cagttgtcca tcagccgccc gaccctcacc tttgtctact tatacaatgc ggccatcagc 900
ttgggctatg ccaacagctg cctcaacccc tttgtgtaca tcgtgctctg tgagacgttc 960
cgcaaacgct tggtcctgtc ggtgaagcct gcagcccagg ggcagcttcg cgctgtcagc 1020
aacgctcaga cggctgacga ggagaggaca gaaagcaaag gcacctgaac tagt 1074

<210> 17
<211> 1283
<212> DNA
<213> Homo sapiens

<400> 17
agtcgacatg tcagtgggag ccatgaagaa gggagtgggg agggcagttg ggcttggagg 60
cggcagcggc tgccaggcta cggaggaaga ccccccttccc aactgcgggg cttgcgctcc 120
gggacaaggt ggcaggcgct ggaggctgcc gcagcctgcg tgggtggagg ggagctcagc 180
tcggttgtgg gagcaggcga ccggcactgg ctggatggac ctggaagcct cgctgctgcc 240
cactggtccc aacgccagca acacctctga tggccccgat aacctcactt cggcaggatc 300
acctcctcgc acggggagca tctcctacat caacatcatc atgccttcgg tgttcggcac 360
catctgcctc ctgggcatca tcgggaactc cacggtcatc ttcgcggtcg tgaagaagtc 420
caagctgcac tggtgcaaca acgtccccga catcttcatc atcaacctct cggtagtaga 480
tctcctcttt ctcctgggca tgcccttcat gatccaccag ctcatgggca atggggtgtg 540
gcactttggg gagaccatgt gcaccctcat cacggccatg gatgccaata gtcagttcac 600
cagcacctac atcctgaccg ccatggccat tgaccgctac ctggccactg tccaccccat 660
ctcttccacg aagttccgga agccctctgt ggccaccctg gtgatctgcc tcctgtgggc 720
cctctccttc atcagcatca cccctgtgtg gctgtatgcc agactcatcc ccttcccagg 780
aggtgcagtg ggctgcggca tacgcctgcc caacccagac actgacctct actggttcac 840
cctgtaccag tttttcctgg cctttgccct gccttttgtg gtcatcacag ccgcatacgt 900
gaggatcctg cagcgcatga cgtcctcagt ggcccccgcc tcccagcgca gcatccggct 960
gcggacaaag agggtgaccc gcacagccat cgccatctgt ctggtcttct ttgtgtgctg 1020
ggcaccctac tatgtgctac agctgaccca gttgtccatc agccgcccga ccctcacctt 1080
tgtctactta tacaatgcgg ccatcagctt gggctatgcc aacagctgcc tcaacccctt 1140
tgtgtacatc gtgctctgtg agacgttccg caaacgcttg gtcctgtcgg tgaagcctgc 1200
agcccagggg cagcttcgcg ctgtcagcaa cgctcagacg gctgacgagg agaggacaga 1260
aagcaaaggc acctgaacta gtt 1283

<210> 18
<211> 420
<212> RNA
<213> Homo sapiens

<400> 18
caaaagcugg agcuccaccg cgguggcggc cgcucuagcc cacuaguuca ggugccuuug 60
cuuucugucc ucuccucguc agccgucuga gcguugcuga cagcgcgaag cugccccugg 120
gcugcaggcu ucaccgacag gaccaagcgu uugcggaacg ucucacagag cacgauguac 180
acaaaggggu ugaggcagcu guuggcauag cccaagcuga uggccgcauu guauaaguag 240
acaaagguga gggucgggcg gcugauggac aacuggguca gcuguagcac auaguagggu 300
gcccagcaca caaagaagac cagacagaug gcgauggcug ugcgggucac ccucuuuguc 360
cgcagccgga ugcugcgcug ggaggcgggg gccacugagg acgucaugcg cugcaggauc 420

<210> 19
<211> 18
<212> PRT
<213> Rattus sp.

<220>
<223> The 6th cysteine residue binds with the 15th cysteine
residue to form a intra-molecular disulfide-bond

<400> 19
Phe Asp Met Leu Arg Cys Met Leu Gly Arg Val Tyr Arg Pro Cys Trp
1 5 10 15

Gln Val

<210> 20
<211> 17
<212> PRT
<213> Rattus sp.

<220>
<223> The 5th cysteine residue binds with the 14th cysteine
residue to form a intra-molecular disulfide-bond

A' cont

<400> 20
Asp Met Leu Arg Cys Met Leu Gly Arg Val Tyr Arg Pro Cys Trp Gln
1 5 10 15

Val

<210> 21
<211> 16
<212> PRT
<213> Rattus sp.

<220>
<223> The 4th cysteine residue binds with the 13th cysteine
residue to form a intra-molecular disulfide-bond

<400> 21
Met Leu Arg Cys Met Leu Gly Arg Val Tyr Arg Pro Cys Trp Gln Val
1 5 10 15

<210> 22
<211> 15
<212> PRT
<213> Rattus sp.

<220>
<223> The 3rd cysteine residue binds with the 12th cysteine residue to form a intra-molecular disulfide-bond

<400> 22
Leu Arg Cys Met Leu Gly Arg Val Tyr Arg Pro Cys Trp Gln Val
1 5 10 15

<210> 23
<211> 14
<212> PRT
<213> Rattus sp.

<220>
<223> The 2nd cysteine residue binds with the 11th cysteine residue to form a intra-molecular disulfide-bond

<400> 23
Arg Cys Met Leu Gly Arg Val Tyr Arg Pro Cys Trp Gln Val
1 5 10

a' cont

<210> 24
<211> 13
<212> PRT
<213> Rattus sp.

<220>
<223> The 1st cysteine residue binds with the 10th cysteine residue to form a intra-molecular disulfide-bond

<400> 24
Cys Met Leu Gly Arg Val Tyr Arg Pro Cys Trp Gln Val
1 5 10